

Comparisons of Job Characteristics

Focus Occupation: [Electrical and Electronic Engineering Technicians \(17-3023\)](#)

Associated Occupation: [Engineering Technicians, Except Drafters, All Other \(17-3029\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	17.6	12.4	<<	Extensive education and/or training may be required
Mathematics	9.2	16.6	11.2	<<	Extensive education and/or training may be required
Mechanical	6.8	16.6	11.6	<<	Extensive education and/or training may be required
Computers and Electronics	8.4	16.2	15.8	0	Current knowledge level may be sufficient
Design	5.2	15.1	10.2	<<	Extensive education and/or training may be required
Production and Processing	6.0	13.3	9.2	<<	Extensive education and/or training may be required
Physics	4.3	12.9	6.3	<<	Extensive education and/or training may be required
Telecommunications	3.9	7.4	8.4	>	Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023)

Associated Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation Monitoring	6.6	12.1	9.4	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	11.5	8.8	<<	Extensive development of skills in this area may be required

Mathematics	6.2	10.8	7.6	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	10.6	8.8	<	A higher skill level may be required
Equipment Maintenance	3.5	10.4	7.9	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	9.4	7.0	<<	Extensive development of skills in this area may be required
Repairing	3.4	9.4	8.0	<	A higher skill level may be required
Technology Design	2.6	7.0	4.9	<<	Extensive development of skills in this area may be required
Installation	1.7	6.2	3.3	<<	Extensive development of skills in this area may be required
Programming	2.2	4.9	3.6	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 96			
Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023) Associated Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visualization	7.5	12.3	9.8	<	Some improvement in abilities may be required
Information Ordering	9.9	12.0	11.0	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	11.2	7.8	<<	Extensive improvement in abilities may be required
Flexibility of Closure	7.8	10.5	8.3	<	Some improvement in abilities may be required
Perceptual Speed	7.4	10.3	7.5	<<	Extensive improvement in abilities may be required
Number Facility	6.3	10.2	5.9	<<	Extensive improvement in abilities may be required
Visual Color Discrimination	6.4	9.6	9.6	0	Current ability level may be sufficient
Memorization	5.6	7.5	6.6	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 75
Focus Occupation: Electrical and Electronic Engineering Technicians (17-3023) Associated Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)		
Tools and Technologies		Exclusivity

Business function specific software	1
Circuit assemblies and radio frequency RF components	40
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Content management software	6
Cutting and crimping and punching tools	3
Data management and query software	1
Development software	4
Electrical hardware and supplies	47
Electrical measuring and testing equipment	7
Electronic and communication measuring and testing instruments	14
Face and head protection	7
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Integrated circuits	18
Light and wave generating and measuring equipment	4
Machine tools	7
Mechanical instruments	14
Network applications software	1
Operating environment software	12
Power conditioning equipment	33
Power generators	16
Power tools	2
Soldering and brazing and welding machinery and supplies	6
Transportation related equipment and instruments	29
Viewing and observing instruments and accessories	4
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.